

Letter 5



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 10
1200 Sixth Avenue
Seattle, WA 98101

December 31, 2003

Reply To
Attn Of: ECO-088

Ref: 01-078-BIA

Philip Sanchez
Bureau of Indian Affairs
46807 B Street
Pendleton, OR 97801

Dear Mr. Sanchez:

The U.S. Environmental Protection Agency (EPA) has completed its review of the draft Environmental Impact Statement (EIS) for the proposed **Wanapa Energy Center** (CEQ No. 030515) in accordance with our authorities and responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. The draft EIS has been prepared in response to a proposal to construct and operate a natural gas-fired power plant near Umatilla, Oregon and to distribute the generated power over the Federal Columbia River Transmission System. The EIS evaluates the applicant's proposed power plant and multiple transmission line and pipeline alignments as well as the No Action alternative. The applicant's proposed project is identified as the agency-preferred alternative in the draft EIS.

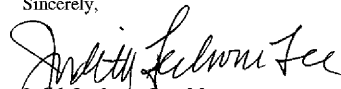
Based on our review and evaluation, we have assigned a rating of EC-2 (Environmental Concerns - Insufficient Information) to the draft EIS. This rating, and a summary of our comments, will be published in the *Federal Register*. A copy of the rating system used in conducting our review is enclosed for your reference.

Our concerns are related to the following topics which are discussed in greater detail in the enclosure to this letter:

- *Project-Related Impacts and Needed Mitigation Measures;*
- *Air Quality;*
- *Cumulative Effects;*
- *Consistency with the Federal Columbia River Power System Biological Opinion;*
- *Range of Alternatives;*
- *Coordination with other Decision Making Processes; and*
- *National Pollutant Discharge Elimination System (NPDES) Permit.*

Thank you for the opportunity to provide comments on the draft EIS. I urge you to contact Bill Ryan of my staff at (206) 553-8561 at your earliest opportunity to discuss our comments and how they might best be addressed in the EIS.

Sincerely,


Judith Leckrone Lee, Manager
Geographic Implementation Unit

Enclosures

cc: Tom McKinney, BPA

Letter 5 Continued

U.S. Environmental Protection Agency Comments on the Draft Environmental Impact Statement (EIS) for the Proposed Wanapa Energy Center

Project-Related Impacts and Needed Mitigation Measures

We are concerned that a number of yet-to-be-developed plans, procedures and surveys identified in the EIS would generate information that appears to be necessary to define the affected environment and effects from the proposed project and/or identify necessary mitigation measures. We believe that such information should be developed and presented in the EIS, per the direction of the implementing regulations for the NEPA to “insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken” (40 CFR 1500.1(b)) and to “include appropriate mitigation measures not already included in the proposed action or alternatives” (40 CFR 1502.14(f)). For example, the draft EIS indicates or suggests that the following efforts have not yet been completed, but would be after issuance of the Record of Decision (ROD) for the project:

- Conduct pre-construction weed inventory - needed to define affected environment, impacts and mitigation;
- Conduct breeding raptor surveys - needed to define affected environment, impacts and mitigation;
- Conduct avian breeding surveys - needed to define affected environment, impacts and mitigation;
- Conduct surveys of special status reptiles and amphibians - needed to define affected environment, impacts and mitigation;
- Develop site-specific construction traffic flow plan - needed to define affected environment, impacts and mitigation;
- Develop stormwater pollution prevention plan - needed to define mitigation;
- Develop spill prevention and control plan - needed to define mitigation;
- Develop dust control measures - needed to define mitigation;
- Develop vegetation reclamation procedures, erosion control measures, and noxious weed control measures - needed to define mitigation.

These efforts appear to be necessary to define project-specific effects and identify measures needed to mitigate identified impacts. Consequently, they should be completed and presented in the EIS. We recommend that the Bureau of Indian Affairs (BIA) and Bonneville Power Administration (BPA) ensure that all necessary analyses/studies are included in the EIS so that effects and appropriate mitigation approaches are defined and disclosed to the public (in the EIS) before decisions are made, as directed by the NEPA regulations.

The clear identification of the specific mitigation measures that would be employed with

Responses to Letter 5

5-1 The commenting agency is correct in saying that certain inventories, surveys, and plans were not included in the Draft EIS. Several of the plans (storm water and traffic) requested by the commenter are typically not included in an EIS, as they cannot be defined until the final engineering design phase of the project is completed. This phase occurs after a ROD has been reached by the appropriate agencies. Since the publication of the Draft EIS, additional wildlife surveys were completed by CTUIR Wildlife Biologist Eric Quampts, and that information has been updated in Section 3.4.1.3; impacts have been updated in Section 3.4.2.3. No new mitigation measures were identified as a result of these surveys.

As discussed in Section 3.4.1.1, an inventory of noxious and invasive weeds was developed for the Wanaket Wildlife Management Area. This study is representative of the project area because it is directly adjacent and is of a contiguous land use. Therefore, a new study was not warranted. Impacts and mitigation were likewise discussed in the Draft EIS in Section 3.4.2.3. Noxious weed control plans are appropriately addressed during the final project design and engineering phase, which typically occurs post EIS.

The development of a storm water pollution prevention plan and spill prevention and control plan would occur when the Notice of Intent to Discharge Storm Water is submitted to the USEPA (tribal lands) and ODEQ (non-tribal lands), just prior to the initiation of construction.

A traffic flow plan would be developed, in cooperation with local officials, at the time that design and engineering plans are finalized, just prior to construction.

The development of vegetation reclamation procedures, erosion control measures and dust control measures also would be addressed using best management practices as part of final project design and the plans already discussed.

Letter 5 Continued

- 5-1 project implementation, the identification of locations where they would be applied, and a discussion (citing applicable reports, papers, etc.) of their effectiveness in avoiding or reducing effects are needed to define project-related impacts reported in the EIS.

Air Quality

We are concerned that the information presented in the air quality section of the EIS is overly general, with little project-specific information presented to inform the public and decision maker of expected emission levels or impacts. While the EIS does present emissions and dispersion modeling information developed for the Prevention of Significant Deterioration (PSD) permit application, that information represents only a portion of the emissions and impacts that would result from the construction and operation of the proposed power plant. Consequently, we recommend that the EIS be revised to include the additional information discussed below.

Construction Emissions - Pollutants that would be emitted from construction-related activities should be explicitly identified, quantified and presented in the EIS.

Hazardous Air Pollutants - Page 3.4-6 of the EIS indicates that the proposed facility would be a source of hazardous air pollutants (HAPs). The EIS should identify the HAPs that would be emitted from the facility, the amounts emitted quantified, and their effects assessed.

- 5-2 Impact Assessments - The presentation of dispersion modeling results presented in the EIS should be revised to ensure that results from the most current analyses conducted for the PSD permit are presented. The discussions should also clearly identify all of the sources included in the dispersion modeling analysis. As written, it is difficult to determine which sources (on the facility and off the facility) have been included in the modeling discussed in the EIS.

Ammonia - The EIS should include an assessment of the ammonia emissions from the facility. This analysis should identify the amount of ammonia that would be emitted from the project and include an assessment of the effects from those emissions.

Start-up Emissions - The pollutants that would be emitted during start-up conditions should be quantified and presented in the EIS. An assessment of the effects from these emissions (and their significance) should also be included in the EIS.

Cooling Tower Vapor Plumes and Drift - We were unable to determine how the conclusions related to cooling tower vapor plumes from the proposed facility have been reached. Discussions beginning on page 3.4-20 of the draft EIS present the general findings of analyses conducted for another project and lead to the conclusion that vapor plumes from the proposed plant are not "predicted." We recommend that the analysis include a discussion of how the information and conclusions cited are applicable to the currently proposed project. Without such a discussion, the conclusions do not appear to

Responses to Letter 5

- 5-2 Construction Emissions. During the approximately 24-month construction process, emissions would consist of fugitive dust and combustion exhaust emissions from construction equipment and vehicles. Fugitive dust emissions would result from dust entrained during project site preparation, on-site travel on paved and unpaved surfaces, and aggregate and soil loading and unloading operations. Wind erosion of disturbed areas also would contribute to fugitive dust.

Combustion emissions would result from diesel construction equipment, various diesel-fueled trucks, diesel-powered equipment (welding machines, electric generators, air compressors, water pumps, etc.), and locomotives delivering equipment, and vehicle emissions from workers commuting to the construction site.

Table shows the estimated average annual heavy equipment exhaust and fugitive dust emissions for on-site construction activities over the 24-month construction schedule.

Table
Annual Emissions Estimated During On-site Construction (Tons Per Year)

	PM ₁₀	NO _x	CO	VOC	SO _x
Construction Equipment	1.4	20.2	7.0	1.64	0.66
Fugitive Dust	39.6				
Total Emissions	41.0	20.2	7.0	1.64	0.66

Source: Wallula Generation.

The construction of the pipelines and transmission line would generate short-term emissions including fugitive dust and construction equipment exhaust emissions. Fugitive dust would be controlled by conventional construction practices (e.g., road watering, covering of dust piles, etc.) to comply with state, local, or federal regulations.

Responses to Letter 5

5-2 Cont'd

Hazardous Air Pollutant (HAP) Emissions and Ambient Impacts. Wanapa would emit the following hazardous air pollutants (HAPs) to be regulated by the USEPA under the project's Title V Operating Permit. HAPs are probable or known carcinogens that may be linked to health effects in humans from long-term exposure. The following table shows the emission rates and ambient impacts for each HAP.

Table

Pollutant	Potential Emission Rate (lb/hr)	Potential Emission Rate (tpy)	Ambient Impact (24-hour) (ug/m ³)	Ambient Impact (Annual) (ug/m)
1,3-Butadiene	1.08E-03	4.72E-03	5.71E-04	3.25E-04
Acetaldehyde	0.10	0.44	5.31E-02	3.02E-02
Acrolein	1.60E-02	7.03E-02	8.49E-03	4.85E-03
Benzene	3.01E-02	0.13	1.59E-02	9.08E-03
Ethylbenzene	8.02E-02	0.35	4.25E-02	2.42E-02
Formaldehyde	1.78	7.8	9.42E-01	5.38E-01
Hexane	0.54	2.36	2.85E-01	1.63E-01
Naphthalene	3.26E-03	1.43E-02	1.72E-03	9.84E-04
PAH	5.52E-03	2.42E-02	2.92E-03	1.66E-03
Propylene Oxide	7.27E-02	0.32	3.85E-02	2.19E-02
Toluene	0.33	1.43	1.72E-01	9.84E-02
Xylenes	0.16	0.70	8.49E-02	4.85E-02

These emission levels qualify Wanapa as a major source of HAPs under the National Emission Standards for Hazardous Air Pollutants (NESHAP) program. The applicable standards under the NESHAP program would be regulated under the projects' Title V Operation Permit, to be issued by the USEPA. Emissions of HAPs from the turbines are controlled through the use of the oxidation catalyst control device.

Ammonia. Wanapa would emit ammonia from the steam generator stacks at a maximum concentration of 5 ppm, per the draft air quality permit from the USEPA. This emission rate would result in a maximum annual ambient impact (at the receptor with the highest concentration of ammonia) of 1.20 parts per billion (ppb). Ammonia impacts from Wanapa at other locations within the 10 kilometer monitoring grid are much lower than this amount. This maximum impact can be compared with typical background concentrations of ammonia in grassland areas of 10 ppb.

Start-Up Emissions. Startups of the individual gas turbines are characterized in terms of the length of shutdown time, and the corresponding steam drum metal temperature during startup. Depending on the length of time that has elapsed since the unit last shut down, the type of startup is referred to as a "cold," "warm," or "hot" start.

Responses to Letter 5

Emissions of NO_x, VOC, and CO have been estimated for each of the three types of starts, as shown in **Table** below.

Table

Estimated startup emissions of NO_x, VOC, and CO (per turbine)

Type of Start	Length of Start (hrs/start)	NO _x Emissions (lb/start)	VOC Emissions (lb/start)	CO Emissions (lb/start)
Hot Start	2	204.32	31.27	618.28
Warm Start	2.75	282.73	42.66	882.42
Cold Start	3.5	361.14	54.04	1146.56

Emissions from an estimated number of startups are considered in the dispersion modeling analyses for Class I and Class II air quality impacts, and for Class I acid deposition and visibility impacts.

Cooling Tower Drift. The effects of cooling tower drift on vegetation have been re-evaluated based on additional deposition information. This information is presented in .

CO₂ emissions. Emissions of carbon dioxide (CO₂), methane, and nitrous oxide from Wanapa have been estimated at the rates shown in **Table** below when operating at maximum firing rates for an entire year.

Table

Greenhouse Gas Emissions from Wanapa Energy Center

Pollutant	Annual Emissions (1,000 tons)	Global Warming Potential (GWP*), 100-yr	Annual Emissions, CO ₂ Equivalent (1,000 tons)
CO ₂	4594.6	1	4594.6
Methane	0.28	21	5.8
N ₂ O	0.0055	310	1.7
Total			4602.2

*Global Warming Potential: A measure of how much a given mass of greenhouse gas is estimated to contribute to global warming. It is a relative scale which compares the gas in question to that of the same mass of carbon dioxide, whose GWP equals 1.

This quantity of CO₂ emissions from Wanapa corresponds to 4.17 teragrams of CO₂. According to the USEPA's GHG Inventory 2004, "Inventories of U.S. GHG Emissions and Sink: 1990-2002," the U.S. emitted a total of 5,782.4 teragrams (Tg) of CO₂ in 2002. The Oregon Department of Energy, in their "Report on Reducing Oregon's Greenhouse Gas Emissions" (<http://www.energy.state.or.us/climate/gggas.htm>), forecasts statewide CO₂ emissions of 67.017 million tons in 2005.

Letter 5 Continued

5-2

be supported. Conclusions related to the potential significance of impacts from cooling tower drift should also be better supported with additional discussion. The information presented does not support the conclusion of “anticipated low level of impact.”

CO₂ Emissions - The EIS should present estimated CO₂ emissions from the project, contrasted with state, regional or national CO₂ budgets.

Cumulative Effects

The NEPA regulations require Federal agencies to evaluate direct and indirect effects (including cumulative effects). The NEPA regulations define cumulative effects as those that result from the incremental impact of the proposed project when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes these actions (40 CFR 1508.7). We recommend consulting *Considering Cumulative Effects Under the National Environmental Policy Act* issued by the Council on Environmental Quality in 1997 in the further development of the cumulative effects analysis for this EIS.

5-3

Air Quality - The EIS presents no evidence that a project-specific cumulative effects analysis has been conducted in the development of this EIS, as required by the NEPA regulations (see 40 CFR 1502.16). Section 6.3.4 of the EIS presents a very general discussion of modeling that has been conducted in the development of the PSD application and by BPA in evaluating broad-scale effects of additional power generation in the region. The EIS provides neither the results of those analyses nor any discussion of how those analyses are sufficient to assess cumulative effects consistent with NEPA direction. While the BPA studies provide valuable insights into potential effects from new power generation sources, they do not represent a comprehensive cumulative effects analysis because they do not account for contributions from existing sources or reasonably foreseeable non-power generation sources. In the context of NEPA, cumulative effects are those that result from the incremental impact of the action (in this case, the Wanapa Energy Center) when added to other past, present, and reasonably foreseeable future actions. With the exclusive focus of the BPA studies on proposed power generating sources, important elements of a cumulative effects analysis are not contained in the evaluation. Consequently, we recommend that the EIS be revised to include an analysis of cumulative effects, consistent with the direction of the NEPA regulations.

5-4

Biological resources - In describing the cumulative effects that are apparently associated with water withdrawal, Section 6.3.3 of the EIS states that the “potential cumulative withdrawal effects as well as entrainment effects have already been considered” with respect to the water intake structure. The reports or studies where these effects have been evaluated should be cited and their results summarized and presented in the EIS. Lacking this information, the EIS contains no assessment of the cumulative effects associated with water withdrawal from the Columbia River.

Responses to Letter 5

5-3

A dispersion modeling analysis was conducted for Wanapa to assess the impacts of the proposed project, combined with the impacts of nearby sources and baseline emissions in the area within 10 km of Wanapa. This area is designated as a Class II area for air quality standards. In the initial dispersion modeling analysis for this area (Class II analysis), emissions of NO_x and PM₁₀ from Wanapa resulted in impacts above the significant impact thresholds (see **Table 3.5-7**). These results triggered a more refined modeling analysis of the total impacts in the area (NAAQS analysis), and of the deterioration in air quality in the area since the PSD baseline dates (PSD Increment analysis). These refined modeling analyses included impacts from other sources in the area that might also affect the air quality.

The following procedures were followed to identify the nearby sources and determine which to include in the NAAQS and PSD Increment analyses:

- Determined the distance from Wanapa to the furthest location exhibiting a significant impact. This distance was 1.5 km for NO₂ and 17.09 km for PM₁₀, and is called the Significant Impact Area (SIA).
- Obtained emission inventories from the Washington Department of Ecology (Ecology) and the Oregon Department of Environmental Quality (DEQ) for all industrial sources located within the SIA plus 50 km (i.e., 51.5 km from Wanapa for NO₂ sources and 67.09 km away for PM₁₀ sources).
- A screening method, based on allowable emission rates and distance from the facility, was applied to screen out sources with impacts too low to significantly affect air quality within the SIA. As a conservative measure, the emission thresholds that would trigger inclusion in the nearby source inventory were halved from those recommended under Oregon DEQ modeling guidance (i.e., it was made more difficult to exclude sources from the refined modeling analysis). Additionally, before removing a source from the list, it was modeled using a screening dispersion model (SCREEN3) to verify that it would not have a significant impact at any location within Wanapa’s SIA.
- The remaining nearby source list was included in NAAQS and PSD Increment analyses for Wanapa. Emissions from these sources were modeled at their maximum allowable emission rates. This method contrasts with the PSD modeling analyses performed for most other power projects in the Northwest, which only included recent actual emissions from nearby sources. This more conservative method ensures that the modeling analysis accounts for reasonable foreseeable future growth of surrounding industrial facilities.

Responses to Letter 5

5-3 Cont'd

The final list of industrial sources included in the modeling analysis is shown below.

Table
Industrial Sources Included in the Class II Area Nearby Source Inventory

Facility	Location
ConAgra, Inc.	Umatilla, OR
HPP Generating	Hermiston, OR
Hermiston Generating	Hermiston, OR
Umatilla Generating	Hermiston, OR
PGE Boardman	Boardman, OR
NW Pipeline (Plymouth Plant)	Plymouth, WA
Proposed Wallula Power Plant	Wallula, WA
PG&E Gas Transmission NW	Wallula, WA
Blue Mountain Asphalt	Hermiston, OR
J-M Manufacturing	Umatilla, OR
Umatilla Ready Mix	Hermiston, OR
Burns Funeral Service	Hermiston, OR
Hermiston Foods	Hermiston, OR
JR Simplot Company	Hermiston, OR
U.S. Army Umatilla Chemical Depot	Hermiston, OR
Northwest Pipeline Corporation	Stanfield, OR
Lamb-Weston, Inc.	Hermiston, OR
Celpril Industries, Inc.	Hermiston, OR
Pacific Chemical Corp	Boardman, OR
Gunderson Northwest	Finley, WA
Boise Cascade	Wallula, WA
Transtate Asphalt	Richland, WA
Plymouth Energy LLC	Plymouth, WA
Plymouth Tomato Farm	Plymouth, WA
Hermiston Rock Products	Hermiston, OR

In the NAAQS analysis, the impacts of the maximum allowable emissions from Wanapa and the surrounding industrial sources were modeled. A background concentration was added to the modeling results to represent background pollutant concentrations from farming activities, mobile sources, natural pollutant concentrations, and more distant sources. A conservative background concentration was obtained by using the monitored concentrations at the NO₂ and PM₁₀ monitors located at the Coyote Springs Plant in Boardman, Oregon. For the 24-hour PM₁₀ standard, a monitored concentration of 105 mg/m³ was used in the analysis. This concentration represents the single highest day of ambient PM₁₀ concentrations from a year of data. (The second-highest daily concentration was 81 mg/m³, and the average concentration was 20 mg/m³). This background concentration, representing the single highest day of observed concentrations at the monitor, was added to the maximum impact from the dispersion modeling results. This method results in a very conservative estimate of emissions, since in reality, the highest impacts are unlikely to occur on the same day as the highest background concentration. The annual average from the monitoring data was used for the background concentration for the annual averaging period.

Responses to Letter 5

In the PSD Increment analysis, the impacts of the maximum allowable emissions from Wanapa and the surrounding industrial sources were modeled. The purpose of the PSD Increment analysis is to measure the change in ambient air concentrations after specified PSD baseline dates as a result of new sources of emissions constructed after those dates, and pre-baseline sources of emissions that have been retired since those dates. To provide a conservative estimate of impacts, it was assumed that all sources in the area were installed after the PSD baseline dates.¹ An evaluation of vehicle emissions and ship/barge emissions in the nearby area also was conducted to determine whether emissions from those sources have increased since the baseline dates and should be included in the analysis. The evaluation concluded that efficiency gains and switching to lower-sulfur fuels over time has more than offset any traffic increases from mobile sources. Since the net emissions of mobile sources have decreased over time, these emissions were not included in the modeling analysis.

The results of both the NAAQS and PSD Increment analyses have been included in the Final EIS page in Section 3.5.2.2.

¹The PSD baseline dates for PM₁₀ are 1/6/75 for major sources, 8/7/77 for minor sources in Oregon, 12/14/77 for minor sources in Washington, and 6/24/94 for minor sources on Tribal lands. The PSD baseline dates for NO₂ are 2/8/88 for major sources in all areas and minor sources in Oregon, 2/11/92 for minor sources in Washington, and 6/9/90 for minor sources on Tribal lands.

5-4 The potential impacts of water withdrawal from the Columbia River on federally listed salmonid species were accounted for in the previous National Environmental Policy Act (NEPA) and Section 7 analyses for the Port of Umatilla Water Supply. The potential effects of withdrawing up to 62 cfs for the Port of Umatilla were analyzed in a Biological Assessment in 1993. A concurrence letter was written by NMFS on March 4, 1994 that stated, "...NMFS concurs with USACE's determination that the proposed construction of water intake pump station in the Columbia River near Umatilla, Oregon (Permit Application Number 93-00941) is not likely to adversely affect listed Snake River sockeye salmon, Snake River spring/summer, or Snake River fall chinook salmon." The proposed water volume for the Wanapa Project is within the Port's 62 cfs volume analyzed in the previous NEPA and Section 7 evaluations.

Letter 5 Continued

Consistency with the Federal Columbia River Power System Biological Opinion

5-5 The EIS does not present an assessment of whether the proposed water withdrawal from the Columbia River for the project would conform with the requirements of the 2000 Biological Opinion (BO) issued by the National Marine Fisheries Service (NOAA Fisheries). It is our understanding that analyses in the BO are based on withdrawals that are being used (not those that are permitted). Because the proposed withdrawal is part of a water right that is not currently being used, it appears to fall outside the analyses and findings of the BO. Consequently, the EIS should present a demonstration that the proposed withdrawal would conform with the BO and the conservation objectives it is designed to achieve. As part of this analysis, the EIS should identify mitigation measures that would be implemented when the target flow objectives of the BO are not being met.

Range of Alternatives

We are concerned with the narrow range of alternatives being evaluated in the draft EIS. The EIS does not include an evaluation of alternative locations or sizes for the proposed power plant. While page 2-45 indicates that other sites in Umatilla and Morrow counties were considered prior to selecting the proposed site (presumably by the applicant), the EIS does not identify the sites considered nor does it indicate how each of the sites relates to the criteria used to determine the suitability of each site in meeting the purpose and need for the project. With the elimination of all alternatives to the applicant's proposed power plant from detailed review, the EIS essentially evaluates a single action alternative and a no action alternative. The other "alternatives" being evaluated (different pipeline and transmission line alignments) represent variations of project components that should be evaluated in the EIS, but do not represent alternatives to the proposed action as none of them would individually meet the purpose and need to generate and transmit power if selected.

5-6 The evaluation of a single power plant alternative seems to be inconsistent with the direction of the National Environmental Policy Act (NEPA) regulations to "present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options to the decision maker and the public" (see 40 CFR 1502.14). The EIS provides no evidence that BIA, as the lead Federal agency, has subjected the proposed power plant to an independent, hard look to ensure that reasonable alternatives (particularly related to plant location and size) have been rigorously explored and objectively evaluated in the EIS, per the NEPA regulations. Alternative plant locations and sizes could potentially meet the purpose and need for the project while reducing environmental (and other) effects. Alternative plant locations and sizes would also directly influence BPA's decision on whether and how to provide transmission service to the project (as well as associated effects and costs). Consequently, we believe that it is incumbent on BIA to ensure that the NEPA process is used to rigorously explore and objectively evaluate all reasonable alternatives to meet the underlying purpose and need (per 40 CFR 1502.13 and 1502.14), before Federal decisions are made and resources are committed. Results of such evaluations should be reported in the EIS.

Responses to Letter 5

5-5 The USEPA noted, in regards to the project's use of an existing water right from the Columbia River, that the Draft EIS did not address the applicability of NOAA Fisheries' 2000 Biological Opinion, issued under the Endangered Species Act, about impacts to listed species habitat from the management of the Columbia River by three federal agencies – BPA, the USACE and Reclamation. The Biological Opinion on operation of the Federal Columbia River Power System (2000) has no relevance to any aspect of the proposed Wanapa Energy Project because the Project would not affect river operations.

The Project would receive its water from an existing Regional Water System and would be a customer of the Port of Umatilla and the City of Hermiston under essentially similar purchase contract as Hermiston Generating, Umatilla Generating and the Port's other industrial customers. The water in the Regional Water System comes from a pre-1979 water right belonging to the Port of Umatilla, which would conform to any applicable federal and state statutory and regulatory requirements. It appears from the precedent that this Project would be able to purchase all its water needs from the same regional water system if it is constructed at the same location, but outside tribal trust land. Therefore, due to the existence of water rights and the concurrence statement by NMFS noted above, the allocated water in the Regional Water System is available and would be used by other users similar to Hermiston Generating and Umatilla Generating power plants whether Wanapa Project is constructed or not. However, discussions with NOAA Fisheries would resolve whether the Project must take certain water replacement mitigation actions not required or implemented by similar projects to comply with the Endangered Species Act.

No change to the existing §404 permit, issued by the USACE for the Port's water supply, is necessary or currently planned. The federal authorizations related to the Wanapa Energy Project are BPA's transmission system interconnection at McNary Substation, federal authorizations related to the Wanapa Energy Project are BPA's transmission system interconnection at McNary Substation, Reclamation's license to store plant discharge water in Cold Springs Reservoir for irrigation use, the USEPA's new source air permit under the Clean Air Act, and BIA's approval of the lease; none of these actions concern operation of the Federal Columbia River Power System.

5-6 In order to diversify the tribal source of income, and reduce its reliance on casino business and federal grants, CTUIR decided to develop an industrial base on the land held in trust for them. Therefore, one of the primary aspects of the project's purpose and need is to provide a steady, and reliable source of revenue derived from an industrial base to the CTUIR. This clarification of the purpose and need is further discussed in Section 1.2. Since the Tribes considered other tribal lands on the reservation not to be suitable for industrial development and construction of a power plant, they designated the land in Section 7 for this purpose. The tribe's goal for the development of a power plant on this land would be to supply power for its own use and the Northwest market. The BIA's permission is required in order to lease this tribal land at this location.

Letter 5 Continued

Coordination with other Decision Making Processes

Page 1-10 of the draft EIS indicates that the proposed wastewater discharge to Cold Springs Reservoir would require approval of the U.S. Department of Interior Bureau of Reclamation (BOR), yet it does not appear that the BOR is a cooperating agency on this EIS. Because more than one federal agency is involved in what must be considered either the "same action" or "a group of actions directly related to each other because of their functional interdependence" (see 40 CFR 1501.5), it appears that the BOR should be an active, formal participant in the further development of this EIS. Having the BOR conduct a separate and independent environmental review may result in improperly segmented consideration of environmental impacts and failure to explore viable alternatives that could mitigate impacts. To ensure a thorough environmental review of the project in its entirety, EPA recommends that BIA work with the BOR to include an expanded evaluation of wastewater discharge alternatives and associated effects in any further evaluation and document development. We recommend that BIA invite the BOR to become a cooperating agency on this EIS to ensure that spirit and intent of the NEPA and its implementing regulations to evaluate potential Federal decisions in an integrated and interdisciplinary manner are met (see Section 102 of NEPA and 40 CFR 1500.2(c), 1500.4(k), 1501.2(d)(3), 1502.14, 1502.15, 1502.16).

Page 1-12 of the draft EIS indicates that Oregon Energy Facility Siting Council (EFSC) approval is required for ancillary facilities (natural gas and wastewater pipelines) that cross non-Federal or non-Tribal public and private lands. The EIS also states that these decisions would require a separate state-administered process. We recommend that the BIA work with the EFSC to better align the current EIS process with the EFSC process, consistent with the NEPA regulations direction to integrate NEPA requirements with other environmental review and consultation requirements (see 40 CFR 1500.4(k)). Better coordination would allow issues identified and analyses conducted in satisfying State of Oregon requirements to be reported in the EIS. This will provide the public and the decision makers with a more complete understanding of the issues and effects of the project in its entirety, prior to decisions being reached.

National Pollutant Discharge Elimination System (NPDES) Permit

Wastewater discharge from the proposed plant would to waters regulated by the State of Oregon. As a consequence, the NPDES permit needed for the preferred alternative would be issued by the Oregon Department of Environmental Quality (ODEQ). We recommend revising Tables 1.3-1 and 1.4-1 to indicate that the NPDES permit needed for the proposed project would be issued by the ODEQ. The discussion in the last paragraph on page 3.2-14 should also be revised to indicate that the necessary NPDES permit would be issued by the State of Oregon.

Responses to Letter 5

5-6 Cont'd

The presentation of alternatives in the EIS reflects the complexity of jurisdictions and authorities involved in siting an economic development project on both tribal and non-tribal lands. The EIS discussed alternative energy development options for the site, as well as alternative locations for siting a power plant on other tribal lands in Section 2.5. The Board of Trustees for CTUIR has determined that the best use of Chapter 7 tribal trust land is energy development. As such, the Proposed Action, and alternative design of lateral facilities, do meet the purpose and need, to provide revenue to CTUIR, as stated in Section 1.2.

5-7 As recommended by the USEPA, the U.S. Department of Interior, Reclamation was invited by BIA to be a cooperating agency and Reclamation has agreed.

The USEPA recommended that the BIA coordinate the siting process with Oregon's Energy Facility Siting Council (EFSC). It was not expected that the State of Oregon through its Department of Energy (ODOE) EFSC would permit the natural gas pipeline located outside of the tribal land. However, after further discussion with ODOE, it was determined that the project would likely go through the EFSC process for permitting of the water pipelines and other ancillaries that do not fall within Tribal and/or Federal jurisdiction. EFSC has specific procedures¹ that would apply in pursuing the permitting of the gas pipelines. All efforts would be made to align these processes as much as possible.

Through the early development of this project, it was recognized that re-use or disposal of plant discharge water from Wanapa would be a complex issue, requiring a creative solution. Initial ideas for discharge included returning the water to the Columbia River, providing water to the adjacent Wanaket Wildlife Refuge, land applying, and discharge into another water body. These alternatives were eliminated from consideration for a variety of reasons. A discussion of the alternatives considered but eliminated are included in Section 2.5.5 of the Final EIS.

¹ Oregon EFSC procedures and processes are in accordance with requirements of the Oregon statutes which can be found in (www.energy.state.or.us/siting) under the heading, "Energy Facility Siting (the sitting process, standards and laws)."

5-8 The plant discharge water to Cold Springs Reservoir would be regulated and permitted under the State of Oregon's NPDES permit program. Storm water discharges from the plant site during construction and subsequent operation would be regulated and permitted under the USEPA Region 10's NPDES permit program. Storm water discharges from construction of the linear facilities not located on tribal trust land would be regulated and permitted under the State of Oregon's NPDES permit program. **Tables 1.3-1 and 1.4-1** have been revised to incorporate the recommended comment about the ODEQ and NPDES.